

IN THE CLAIMS

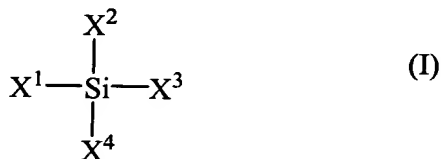
This listing of claims will replace all prior versions, and listings, of claims in the application:

1-24 (Cancelled)

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Claim 25 (New): A dental material comprising a composition that comprises:

- (a) a photocatalytic titanium oxide or a photocatalytic titanium oxide precursor;
- (b) at least one compound selected from the group consisting of:

a silicon compound having the following formula (I):



wherein X^1 , X^2 , X^3 and X^4 each independently represent an alkoxy group or a halogen atom,

a hydrolyzate of said silicon compound (I),

a silicone resin,

silicone resin precursor,

and silica; and

- (c) a liquid medium;

wherein a ratio of (a) to (b) ranges from 20/1 to 1/100 in terms of moles of titanium atoms in (a)/moles of silicon atoms in (b),

wherein said dental material is a material that is fitted within or applied in the mouth.

26 (New) The dental material of Claim 25, wherein a ratio of (a) to (b) ranges from 20/1 to 1/1 in terms of moles of titanium atoms in (a)/moles of silicon atoms in (b).

27 (New): The dental material of Claim 25, wherein the photocatalytic titanium oxide precursor in (a) is a titanium alkoxide.

28 (New): The dental material of Claim 25, wherein the silicone resin precursor in (b) is at least one selected from the group consisting of a silane compound, a silazane, and a mixture thereof.

29 (New): The dental material of Claim 25, wherein said liquid medium is selected from the group consisting of water, alcohol, a mixture of water and alcohol, acetone, methyl ethyl ketone, ethyl acetate, chloroform, toluene, hexane, and combinations thereof.

30 (New): The dental material of Claim 25, further comprising a thickener.

31 (New): The dental material of Claim 25, further comprising at least one particle selected from the group consisting of silver, copper, zinc, metal salt, and a mixture thereof.

32 (New): The dental material of Claim 25, comprising a photocatalytic titanium oxide or a photocatalytic titanium oxide precursor.

33 (New): The dental material of Claim 25, comprising a photocatalytic titanium oxide or photocatalytic titanium oxide precursor, and a liquid medium.

34 (New) The dental material of Claim 25, wherein said composition has been dried or baked.

35 (New) The dental material of Claim 25, wherein said composition has been exposed to photocatalytic light.

36 (New) The dental material of Claim 25, which is a film that is applied within the mouth or to a material fitted within the mouth.

37 (New) The dental material of Claim 25 that is a film that has been applied to a tooth, tooth restored with composite resin, tooth coated with dental manicure, gums or oral mucous membrane.

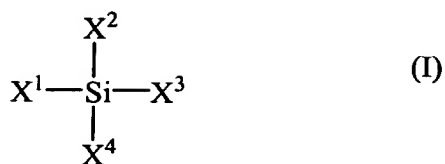
38 (New) The dental material of Claim 25 that is a film that has been applied to a material that is fitted within the mouth.

39 (New) The dental material of Claim 25 selected from the group consisting of a tooth crown restorative material, denture, denture base, denture rebase, orthodontic base, wire, bridge, or mouth piece.

40 (New) A tooth crown restorative material, denture, denture base, denture rebase, orthodontic base, wire, bridge, or mouth piece comprising a composition that comprises:

- (a) a photocatalytic titanium oxide or a photocatalytic titanium oxide precursor;
- (b) at least one compound selected from the group consisting of:

a silicon compound having the following formula (I):



wherein X^1 , X^2 , X^3 and X^4 each independently represent an alkoxy group or a halogen atom,

a hydrolyzate of said silicon compound (I),

a silicone resin,

silicone resin precursor,

and silica; and

(c) a liquid medium;

wherein a ratio of (a) to (b) ranges from 20/1 to 1/100 in terms of moles of titanium atoms in (a)/moles of silicon atoms in (b).

41 (New) The tooth crown restorative material, denture, denture base, denture rebase, orthodontic base, wire, bridge, or mouth piece, of Claim 40, wherein a ratio of (a) to (b) ranges from 20/1 to 1/1 in terms of moles of titanium atoms in (a)/moles of silicon atoms in (b).

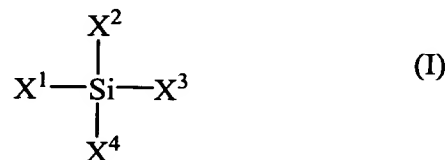
42 (New) The tooth crown restorative material, denture, denture base, denture rebase, orthodontic base, wire, bridge, or mouth piece, of Claim 40 wherein said composition has been dried or baked.

43 (New) The tooth crown restorative material, denture, denture base, denture rebase, orthodontic base, wire, bridge, or mouth piece, of Claim 40 wherein said composition has been exposed to photocatalytic light.

44 (New) A method comprising:

applying to a surface selected from the group consisting of teeth, gums, a dental material fitted within the mouth, and an oral mucous membrane, a composition that comprises:

- (a) a photocatalytic titanium oxide or a photocatalytic titanium oxide precursor;
(b) at least one compound selected from the group consisting of:
a silicon compound having the following formula (I):



wherein X^1 , X^2 , X^3 and X^4 each independently represent an alkoxy group or a halogen atom,

a hydrolyzate of said silicon compound (I),
a silicone resin,
silicone resin precursor,
and silica; and

- (c) a liquid medium;

wherein a ratio of (a) to (b) ranges from 20/1 to 1/100 in terms of moles of titanium atoms in (a)/moles of silicon atoms in (b);

drying said applied composition to form a photocatalytic titanium oxide containing film on said surface; and

exposing said film to light.

45 (New) The method of Claim 44, comprising applying said composition into the mouth of a subject having a dental or oral disease or onto a dental material fitted within the mouth of said subject.

46 (New) The method of Claim 44, comprising applying said composition into the mouth of a subject having halitosis or onto a dental material fitted within the mouth of said subject.

47 (New) The method of Claim 44, comprising applying said composition into the

mouth of a subject having discolored teeth or onto a dental material fitted within the mouth of said subject.

48 (New) The method of Claim 44, comprising applying said composition into the mouth of a subject having a dental or oral disease or onto a dental material fitted within the mouth of said subject.

49 (New) The method of Claim 44, which is a method for bleaching discolored teeth.

50 (New) The method of Claim 44, wherein said composition is applied to a dental material, which is fitted within the mouth.